

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION

C-CATION TECHNOLOGIES, LLC,

*Plaintiff,*

v.

COMCAST CORPORATION, CHARTER  
COMMUNICATIONS, INC., CEQUEL  
COMMUNICATIONS, LLC dba  
SUDDENLINK COMMUNICATIONS,  
CABLE ONE, INC., ALMEGA CABLE  
INC., LONGVIEW CABLE TELEVISION  
COMPANY, INC., AND KILGORE  
VIDEO, INC.

*Defendants.*

**Case No. 2:11-CV-30-JRG-RSP**

**C-CATION TECHNOLOGIES, LLC'S  
OPENING CLAIM CONSTRUCTION BRIEF**

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## I. INTRODUCTION

Plaintiff C-Cation Technologies, LLC (“Plaintiff” or “C-Cation Tech”) hereby respectfully submits its Opening Claim Construction Brief in support of its proposed constructions for the claim terms at issue in U.S. Patent No. 5,563,883 (“the ’883 patent”).<sup>1</sup>

The ’883 patent relates to improving the quality of services delivered by cable service providers to subscribers. These services include telephone, television, and/or internet service. Figure 1 shows an example of a communication system. A central controller 10, located at the service provider, communicates with wide area networks 18 on one end, and to the service provider’s customers on the other. *See Ex. 1.* The subscriber obtains services through remote terminal 14, which can include a cable modem or set top box.

In modern cable systems, the communication between a central controller and remote terminals is bidirectional and spans a wide spectrum of frequencies (channels). The ’883 patent discloses two types of channels—signalling data channels and traffic bearer channels. Signalling data channels carry both signalling and data traffic. *Id.* at col. 5:59-62. The patent discloses that the central controller may organize the remote terminals into smaller groups of terminals, with all terminals in a group being assigned to the same forward and reverse signalling data channels. *See id.* at col. 3:40-50. In certain circumstances, a specific remote terminal may have traffic demands that exceed the practicality of transmission over a channel that is shared with other remote terminals. In this unique circumstance, the ’883 patent describes setting up a dedicated traffic bearer channel for that specific remote terminal. *See id.* at 7:45-49.

The ’883 patent discloses and claims a system for the intelligent and flexible

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<sup>1</sup> Exhibits are annexed hereto. A copy of the ’883 patent in searchable PDF form has been provided as Exhibit 1 in accordance with P.R. 4-5(a).

management of channels by the central controller to maximize quality of service and minimize communication errors. Claim 1<sup>2</sup> recites a method of: (1) assigning a forward and reverse signalling data channel to each remote terminal (*see* step (a)); and then (2) managing the channels by monitoring for various quality measures (step (b)), determining if there is a need to assign a remote terminal to a more suitable channel (steps (c) and (d)), and reassigning the remote terminals to the more suitable channel to achieve a better quality of service (step (e)).

Claim 6 includes a channel assignment methodology similar to claim 1 (step (a) of claim 6) with additional elements directed to resolving communication conflicts among remote terminals. In claim 6, the central controller solicits remote terminals to determine whether they have any pending requests (step (b)), and resolves any contention caused by two or more remote terminals attempting to transmit on the same channel simultaneously (step (c)).

## **II. LEGAL STANDARDS FOR CLAIM CONSTRUCTION**

The words of a claim are generally given their “ordinary and customary meaning” as understood by a person of ordinary skill in the art, at the time of the invention, when read in the context of the specification and prosecution history. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc). However, it is not necessary to construe every claim term. *See, e.g., Thorner v. Sony Computer*, 669 F.3d 1362, 1368 (Fed. Cir. 2012) (finding that the term “attached” should be given its plain and ordinary meaning); *see also Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2011); *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (claim construction “is not an obligatory exercise in redundancy”).

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<sup>2</sup> Claims 1, 3-7, 10, and 12 are asserted in this litigation, of which claims 1 and 6 are independent claims.

There are only two exceptions to the general rule that words are generally given their ordinary and customary meaning: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Thorner*, 669 F.3d at 1365 (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1580 (Fed. Cir. 1996)). It is not enough for a patentee to simply disclose a single embodiment or use a word in the same manner in all embodiments, the patentee must “clearly express an intent” to redefine the term. *Id.* Limitations should not be imported from the specification into the claims without a “clear intention to limit the claim scope.” *Arlington Indus. v. Bridgeport Fittings, Inc.*, 632 F.3d 1246, 1254 (Fed. Cir. 2011); *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 843 (Fed. Cir. 2010); *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) (“a patentee is entitled to the full scope of his claims and [a court] will not limit him to his preferred embodiment or import a limitation from the specification into the claims.”); *see also Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 807-09 (Fed. Cir. 2007).

Means-plus-function limitations require special consideration. Under 35 U.S.C. § 112 ¶ 6, the court must first identify the claimed function, then the structure that is disclosed in the specification as corresponding to that function. *Lockheed Martin Corp. v. Space Systems/Loral, Inc.*, 324 F.3d 1308, 1318 (Fed. Cir. 2003). The corresponding structure “must not only perform the claimed function, but the specification must clearly associate the structure with performance of the function.” *JW Enterprises, Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1330 n.1 (Fed. Cir. 2005) (citations and internal quotation marks omitted). The identified structure must include all structure minimally necessary to carry out the claimed function. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1458 n.7 (Fed. Cir. 1998) (en banc).

C-Cation Tech's proposed claim constructions are dictated by the claim language, specification and prosecution history of the patent-in-suit. By contrast, defendants seek claim constructions on an excessive number of terms and take positions that are at odds with the intrinsic evidence, improperly import limitations from the specification, and/or are contrary to the ordinary meanings of the identified terms.

### **III. DESCRIPTION OF AN ORDINARY PERSON OF SKILL IN THE ART**

In the present case, a person of ordinary skill in the art at the time of the invention would have had at least a bachelor's of science degree in electrical engineering, computer science, or a closely related field and two to three years of employment experience in telecommunications, or a closely related field.

### **IV. PROPOSED CONSTRUCTIONS OF THE CLAIM TERMS AT ISSUE**

The parties agree upon the following proposed construction:

Claims	Term	Agreed Construction
6, 7 and 12	polling	soliciting

The parties' agreement is supported by the specification. *See, e.g.*, Ex. 1, col. 3:55-58.

The disputed terms of the '883 patent are discussed below.

#### **A. Preamble Terms**

##### **1. "a shared transmission means for signalling data and user information" (claim 1) / "a shared transmission means" (claim 6)**

Term	C-Cation Tech's Construction	Defendants' Construction
a shared transmission means for signalling data and user information	Phrase should be given its ordinary meaning and does not require additional construction.  To the extent construction is deemed necessary: a medium for transmitting signalling data and user information between a plurality of remote terminals	If construed under 35 U.S.C. § 112(f):  Function: carrying both signalling data and user information  Structure: a physical medium or media having forward and reverse bandwidth separated into dedicated signalling

	<p>and a central controller</p> <p>Phrase should not be construed under 35 U.S.C. § 112(6). If, however, construction under 35 U.S.C. § 112(6) is deemed appropriate:</p> <p>Function: shared transmission of signalling data and user information</p> <p>Structure: includes: (1) airwaves; (2) coaxial cable; (3) fibre optic cable; or (4) wires</p>	<p>data channels and dedicated user traffic channels as shown in Fig. 2</p> <p>If not construed under 35 U.S.C. § 112(f): a physical medium or media having forward and reverse bandwidth separated into dedicated signalling data channels and dedicated user traffic channels</p>
a shared transmission means	<p>Phrase should be given its ordinary meaning and does not require additional construction.</p> <p>To the extent construction is deemed necessary: a medium for transmitting communications between a plurality of remote terminals and a central controller</p> <p>Phrase should not be construed under 35 U.S.C. § 112(6). If, however, construction under 35 U.S.C. § 112(6) is deemed appropriate:</p> <p>Function: shared transmission</p> <p>Structure: includes: (1) airwaves; (2) coaxial cable; (3) fibre optic cable; or (4) wires</p>	Same proposed construction as “a shared transmission means for signalling data and user information”

C-Cation Tech submits that the phrases “a shared transmission means for signalling data and user information” and “a shared transmission means” are not limitations and do not require construction. These phrases appear only in the preambles of claims 1 and 6, respectively. In each instance, the preamble, and particularly each of these phrases, simply describes a feature (a medium for transmission) that necessarily exists in any multiple access communication system, which is specifically the field of the ’883 patent. *See, e.g.*, Ex. 1, col. 1:5-12; col. 5:8-12. The preamble does not specify how the invention is to operate, and deletion of all or part of the preamble would not affect the steps of the claimed invention. Instead, it is the language of the

body of claims 1 and 6 that sets forth the steps of operation of the system. In such circumstances, the language of a preamble is not properly considered to be a claim limitation.

*See Am. Med. Sys., Inc. v. Biolitec, Inc.*, 618 F.3d 1354, 1358-59 (Fed. Cir. 2010) (“A preamble is not regarded as limiting, however, when the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention.”) (internal quotations omitted); *Schumer v. Lab. Computer Sys., Inc.*, 308 F.3d 1304, 1310 (Fed. Cir. 2002). Here, the “shared transmission means” terms in particular do not set out any aspect of the invention, and therefore do not require construction. *See Schumer*, 308 F.3d at 1310 (“It is well settled that if the body of the claim sets out the complete invention, and the preamble is not necessary to give life, meaning and vitality to the claim, then the preamble is of no significance to claim construction because it cannot be said to constitute or explain a claim limitation.”) (internal quotations omitted).

Should the Court determine that these terms are claim limitations, C-Cation Tech submits that they need not be construed as their ordinary meaning is clear to those of ordinary skill in the art at the time of the invention. *Thorner*, 669 F.3d at 1365-66. Indeed, these terms are easily understood in the context of this patent as simply the medium, such as cable, wires or airwaves, by which a terminal and a central controller communicate. *See* Ex. 1, col. 1:7-10, 1:39-49, 5:54-57. This is further supported by numerous publications from the same time period, which each refer to a shared transmission medium in similar context as the ’883 patent without explicitly describing the components that would comprise the medium.<sup>3</sup> Construction of commonly

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<sup>3</sup> See, e.g., Ex. 2 (’366 patent), at abstract, 1:59-61, 6:7-20, 6:28-42, 6:48-8:27 (concerning intermixing circuit and packet data on a shared transmission medium); Ex. 3 (’413 patent), abstract, figs. 1-2, 1:23-36, 2:55-3:30, 3:45-55, 5:48-6:12, 6:26-7:21, 7:40-62 (concerning allocation of bandwidth over a shared transmission medium); Ex. 4 (’735 patent), figs. 2-4, 3:66-4:31, 9:3-5, 9:21-28 (referring to a plurality of stations that communicate on a shared broadcast-(continued...)

understood terms such as the “shared transmission means” terms is not necessary. *See, e.g.*, *Thorner*, 669 F.3d at 1368; *Finjan*, 626 F.3d at 1207; *U.S. Surgical*, 103 F.3d at 1568.

Nevertheless, defendants assert that “a shared transmission means for signalling data and user information” and “a shared transmission means” require construction and should be construed as means-plus-function terms.<sup>4</sup> However, inclusion of the word “means,” does not necessitate construction under § 112 ¶ 6 when the term connotes sufficient structure. *See Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1257 (Fed. Cir. 1999); *Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1347 (Fed. Cir. 2002) (“The mere use of the word ‘means’ after a limitation, without more, does not suffice to make that limitation a means-plus-function limitation.”). Indeed, “if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function,” application of 112 ¶ 6 may be avoided. *M.I.T. v. Abacus Software*, 462 F.3d 1344, 1363 (Fed. Cir. 2006) (emphasis added).

As demonstrated by the extrinsic evidence referred to above (*see supra*, n. 3), it was well understood by those of ordinary skill in the art that each of these terms simply means a

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type transmission medium); Ex. 5 (’167 patent), abstract, fig. 1, 1:32-36, 1:59-2:2, 3:65-4:5, 7:3-12, 13:44-14:10, 29:32-30:5 (referring to a plurality of processors connected to a shared transmission medium); Ex. 6 (’577 patent), abstract, 1:55-64, 2:5-11, 2:55-64, 3:28-68, 5:18-68 (describing a method for providing access by secondary stations to a shared transmission medium); Ex. 7 (’907 patent), abstract, 1:25-35, 1:50-56, 2:4-28, 2:43-3:37, 4:13-31, 6:24-40 (describing an ATM network as a shared transmission medium).

<sup>4</sup> Defendants request the Court to construe the instant terms under 35 U.S.C. § 112(f), which, under the America Invents Act (“AIA”) replaced 35 U.S.C. § 112 ¶ 6. However, this amendment is applicable only to patents filed on or after September 16, 2012. *See AIA, Pub. L. No. 112-29 § 118(e)*, 125 Stat. 297 (2011). In any event, the change to section 112 has no substantive effect. *See Moody v. Aqua Leisure Int’l*, Civil Action No. H-10-1961, 2012 WL 5335842, at \*8 (S.D. Tex. Oct. 26, 2012).

transmission medium commonly used in multiple access telecommunication systems. Indeed, reciting a “shared transmission means” in a telecommunications patent is similar to claiming a “circuit” in a patent in the field of electronics. Both connote sufficient structure and neither requires construction under § 112, ¶ 6. *See Inventio AG v. ThyssenKrupp Elevator Americas Corp.*, 649 F.3d 1350, 1358-59 (Fed. Cir. 2011) (“[W]e have concluded that a claimed ‘circuit,’ coupled with a description of the circuit’s operation in the claims, connotes sufficiently definite structure to skilled artisans to avoid the application of § 112, ¶ 6.”) (citing *M.I.T.*, 462 F.3d at 1355-56); *Moody*, 2012 WL 5335842, at \*10-12 (finding that the term “pump means” sufficiently described structure and that the term was not subject to § 112, ¶ 6).

To the extent that the Court determines that the “shared transmission means” claim terms should be construed under § 112, ¶ 6, the Court should reject defendants’ proposed construction as it provides functional limitations that are not recited in the respective claims. *Lockheed Martin Corp.*, 324 F.3d at 1319 (Fed. Cir. 2003) (For means-plus-function elements, the court must first determine what the claimed function is and then “construe the meaning of the words used to describe the claimed function, using ordinary principles of claim construction.”); *Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001) (“Under § 112, ¶ 6, a court may not import functional limitations that are not recited in the claim, or structural limitations from the written description that are unnecessary to perform the claimed function.”). For example, for the “a shared transmission means” term in claim 6, where the function is properly construed as “shared transmission,” defendants propose “carrying both signalling data and user information,” words that are not connected to “a shared transmission means” as recited. Indeed, “user information” does not appear anywhere in claim 6. Defendants’ proposed function should therefore be rejected as improperly adding limitations.

The defendants also failed to propose proper structure for the terms. The structure of the “shared transmission means” terms properly includes all of the structures disclosed in the patent specification for transmission on a shared communication network. *Lockheed Martin*, 324 F.3d at 1318 (A means-plus-function limitation “must be construed to cover corresponding structure, material, or acts described in the specification and equivalents thereof.”); *Ishida Co. v. Taylor*, 221 F.3d 1310, 1316 (Fed. Cir. 2000) (The “proper application of § 112 ¶ 6 generally reads the claim element to embrace distinct and alternative described structures for performing the claimed function. Specifically, disclosed structure includes that which is described in a patent specification, including any alternative structures identified.”) (internal quotations omitted). The ’883 patent explicitly discloses a “coaxial cable-TV network,” a “radiotelephony and local-area-network (CSMA/CD) environment,” a “CATV network,” including “splitters and taps connecting the branches that make up the network” and further describes that the “present invention is useful for interworking with a variety of different wide area networks.” See Ex. 1, col. 1:7-10, 1:39-49, 5:54-74. Further, “transmission medium” was understood by those of skill in the art to include, by way of example, “optical fiber, coaxial cable, and twisted-wire pairs.” See Ex. 8. Thus, the proper structure includes each communication network disclosed in the patent, and if the “shared transmission means” terms are construed under § 112 ¶ 6, C-Cation Tech’s “means-plus-function” construction provided in the above table should be adopted.

## **2. “user information” (claim 1)**

C-Cation Tech’s Construction	Defendants’ Construction
Phrase should be given its ordinary meaning and does not require additional construction.  To the extent construction is deemed necessary: information intended for a user or sent from a user	information, distinct from the signalling data, transmitted to or from end users of the system; also called user data or user traffic

The term “user information” appears only in the preamble of claim 1 as part of the phrase “a shared transmission means for signalling data and user information.” Thus, C-Cation Tech submits that “user information” is not a limitation for the same reasons as the “shared transmission means” terms. *See supra*, Section IV.A.2. Inclusion of “user information” does not specify how the invention is to operate and therefore is considered superfluous and is not a claim limitation. *See Am. Med. Sys.*, 618 F.3d at 1358-59.

To the extent “user information” is determined to be a limitation, it does not require construction because its meaning is clear both on its face and from the context of the specification and the claim language. *See, e.g., Thorner*, 669 F.3d at 1368; *Finjan*, 626 F.3d at 1207; *U.S. Surgical*, 103 F.3d at 1568. There is no technical or specialized meaning for this term. If construction is deemed necessary, the Court should reject defendants’ proposed construction, which neither clarifies nor explains the terms “user” or “information.” Indeed, in circular fashion, defendants’ construction uses the terms “user” and “information” to define “user information,” thereby highlighting the impropriety of the same. *See U.S. Surgical*, 103 F.3d at 1566-1568 (affirming refusal to give jury instructions construing claim terms where proposed construction simply repeated words from claim); *Wi-Lan, Inc. v. Acer, Inc.*, 712 F. Supp. 2d 549, 574 (E.D. Tex. 2010) (rejecting proposed constructions that “merely rearrange the words of the term to be construed” and improperly insert unrecited limitations).

Further, defendants’ proposed construction seeks to limit user information such that it is “distinct from the signalling data” and also unnecessarily equates “user information” with both “user data” and “user traffic.” Both of these attempts should be rejected. As an initial matter, by including “distinct from signalling data,” defendants’ proposed construction improperly imports limitations not present in the claim language. *See Thorner*, 669 F.3d at 1365-66; *Arlington*

*Indus.*, 632 F.3d at 1254; *i4i Ltd. P'ship*, 598 F.3d at 843; *Kara Tech.*, 582 F.3d at 1348; *Acumed*, 483 F.3d at 807-09. Indeed, there is no support, let alone a clear intent of disavowal in the specification, for requiring user information to be “distinct from the signalling data.”

Further, equating “user traffic” with “user information” contradicts the specification. Indeed, the specification teaches that while signalling data channels are used for both user data and signalling purposes, a traffic channel (for user traffic) may be established when a dedicated channel for a specific user is required. *See* Ex. 1, col. 7:32-49.

Defendants’ construction is not supported by the specification and should be rejected.

## B. “Signalling Data Channel” and “Signalling Data”

### 1. “signalling data channel” (claims 1, 3, 4, 5, 6 and 7)

C-Cation Tech’s Construction	Defendants’ Construction
channel(s) used for carrying signalling or data traffic	the exclusive channels for carrying the signalling data and no more than sporadic (i.e. infrequent, isolated) user information, as distinct from channel(s) dedicated to carrying only user information

Plaintiff’s proposed construction for “signalling data channel” as “a channel used for carrying signalling or data traffic” is fully supported by the specification, which unambiguously discloses that signalling data channels are used for carrying signalling or data traffic. The ’883 patent specification first explains that signalling data and traffic bearer channels are two types of channels that may be used to support communication between the central controller and remote terminals in both the forward and reverse directions, and provides as examples, “i.e., forward signalling data or FD channel 22, forward traffic bearer or FB channel 24, reverse signalling data or RD channel 26, and reverse traffic bearer or RB channel 28.” Ex. 1, col. 5:15-21. The specification then defines the type of communications that each type of channel may carry:

As depicted in FIG. 2, the bandwidth is channelized for carrying traffic in the forward and reverse direction. Data channels are used for carrying signalling or data traffic while bearer channels are used for carrying user traffic similar to circuits in telephony.

*Id.* at col. 5:58-62 (emphasis added); *see also id.* at fig. 2 (depicting the FD, RD, FB, and RB channels). As C-Cation Tech's proposed construction of "signalling data channel" is fully supported by the definition provided in the specification, it should be adopted. *See, e.g., Phillips*, 415 F.3d at 1312-14 (Claim terms should generally be "given their ordinary and customary meaning" as informed by the specification.).

By contrast, defendants seek to improperly read limitations into the claims through their proposed construction. In particular, defendants acknowledge that signalling data channels can carry both signalling and data traffic, but attempt to add the additional limitations that signalling data channels are required to carry "no more than sporadic (i.e. infrequent, isolated) user information, as distinct from channel(s) dedicated to carrying only user information." But there is no support in the specification for limiting "signalling data channels" as defendants propose. While certain embodiments contemplate the transmission of "sporadic user data" over signalling data channels, the claims contain no such limitation. *See Thorner*, 669 F.3d at 1365-66; *Arlington Indus.*, 632 F.3d at 1254; *i4i Ltd. P'ship*, 598 F.3d at 843; *Kara Tech.*, 582 F.3d at 1348; *Acumed*, 483 F.3d at 807-09. Certainly, the '883 patent specification does not provide a "clear intention to limit the claim scope" that would support defendants' proposed construction. *See, e.g., Arlington Indus*, 632 F.3d at 1254.

## 2. "signalling data" (claim 1)

C-Cation Tech's Construction	Defendants' Construction
information concerned with the control of communications	information that establishes and controls channels over which the central controller and remote terminals communicate

The only appearance of the term “signalling data” in the claims of the ’883 patent is in the preamble of claim 1.<sup>5</sup> The dispute between the parties centers on whether signalling data is to be construed as “information concerned with the control of communications,” as C-Cation Tech proposes, or more narrowly as “information that establishes and controls channels over which the central controller and remote terminals communicate,” as defendants propose (emphasis added).

C-Cation Tech’s construction comports with the intrinsic evidence that demonstrates that signalling data is used for more than just establishing and controlling channels. For example, the specification provides for the use of a signalling protocol and describes, for example, that the “controller sends command [*sic*] to the remote terminal.” Ex. 1, col. 7:39-49 (commands and requests for managing communications and the use of a signalling protocol). Further, Figure 9 of the ’883 patent, explicitly provides that “signalling data” constitutes more than merely the “information that establishes and controls channels.” Figure 9 depicts various signalling data used in an embodiment for implementing a telephone network, and includes the following exemplary signalling data types: “incoming call command,” “release command,” “on hook,” “off hook,” “ringing” and “dial-digits,” none of which is used for establishing and controlling channels. Instead, each is concerned with controlling communications over existing channels. The channels themselves are established and controlled using a subset of the signalling data types such as “serial number of the remote terminal for channel assignment during registration process,” “channel re-assignment command,” “lower TID of the range for the selective poll” and “multiple channel request (bandwidth-on-demand).” See, e.g., Ex. 1, Fig. 9.

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<sup>5</sup> While “signalling data” appears only in the preamble of claim 1, which should not be interpreted as a claim limitation (*see supra* Section IV.A.1), C-Cation Tech proposes a construction of “signalling data” to provide clarification for the term “signalling data channel.”

By contrast, defendants' proposed construction impermissibly attempts to read out features of a disclosed embodiment, including the "incoming call command," "release command," "on hook," "off hook," "ringing" and "dial-digits" examples of signalling data in a telephone system. Therefore, defendants' proposed construction should be rejected. *See, e.g., In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303, 1324 (Fed. Cir. 2011) (stating that "there is a strong presumption against a claim construction that excludes a disclosed embodiment").

The extrinsic evidence defendants cite also fails to support defendants' construction. Indeed, none of the evidence defendants cite restricts "signalling data" so as to act only on "channels." Rather, such evidence uniformly refers to communication "connections." *See Joint Claim Construction Chart for Disputed Claim Terms*, D.I. 186-1 at 3-4.

### C. "Remote Terminals" (Claims 1, 3, 4, 6, 7, 10 and 12)

C-Cation Tech's Construction	Defendants' Construction
communication devices at a location remote from the central controller	equipment for forward and reverse communication with a central controller over a specified pair of dedicated signalling data channels and dedicated user traffic channels

"Remote terminal" is a common term in the art of telecommunications that was widely understood at the time of invention, and C-Cation Tech's proposed construction seeks only to clarify what such a device is for the jury; namely, that a "remote terminal" is "remote," or located somewhere other than where the central controller is located, and that a "terminal" is simply a communication device. This construction comports both with the specification and with the extrinsic evidence demonstrating how one of ordinary skill in the art would have understood the term at the time of the invention of the '883 patent.

With respect to "remote," the specification describes that remote terminals are "dispersed

geographically” (Ex. 1, col. 1:15-17), “distributed throughout the network,” (*id.* at col. 3:14-16) “dispersed geographically throughout the network,” (*id.* at col. 5:8-11) and “have different distance from the central controller,” (*id.* at col. 1:47-52).

The specification further describes that “terminals” are communication devices. *See Ex. 1*, col. 3:14-16 (“The remote terminals are equipment supporting the users’ communication need and are distributed throughout the network.”); col. 5:24-26 (“All remote terminals 14 are equipment supporting the users’ communication need and are distributed throughout the network.”). “Terminal” was also commonly understood as a communication device. *See Ex. 8 (IEEE Standard Dictionary)* (defining “terminal” as “a point in a system or communication network at which data can either enter or leave”).

Defendants’ proposed construction seeks to improperly add limitations that go beyond the meaning of “remote terminal” as the term is understood in view of the claim language and the specification. *See Thorner*, 669 F.3d at 1365-66; *Arlington Indus.*, 632 F.3d at 1254; *i4i Ltd. P’ship*, 598 F.3d at 843; *Kara Tech.*, 582 F.3d at 1348; *Acumed*, 483 F.3d at 807-09. Here, defendants’ additional limitations are particularly improper because the claim language includes clear structural language and defendants seek to add functional limitations, including the limitation “for forward and reverse communication with the central controller over a specified pair of dedicated signalling data channels and dedicated user traffic channels.” *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1367-68 (Fed. Cir. 2012) (holding that a district court had “improperly read a ‘purpose’ requirement” into a disputed claim where the claim language only recited a structural limitation); *Schwing GmbH v. Putzmeister Aktiengesellschaft*, 305 F.3d 1318, 1324 (Fed. Cir. 2002) (“Where a claim uses clear structural language, it is generally improper to interpret it as having functional requirements.”). Defendants’ attempt to limit “remote terminals”

by adding functional limitations should be rejected for this additional reason.

#### **D. Channel Assignment Steps**

##### **1. “pair of predetermined signalling data channels” (claims 1, 4 and 5)**

C-Cation Tech’s Construction	Defendants’ Construction
a forward signalling data channel and a reverse signalling data channel determined prior to assignment	one forward and one reverse signalling data channel that are uniquely coupled and that are specified in the remote terminal and central controller before any attempted communication between the two

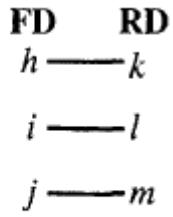
C-Cation Tech submits that “pair of predetermined signalling data channels” be construed as “a forward signalling data channel and a reverse signalling data channel determined prior to assignment.” This construction stems from the claim language and the specification. Claim 1 is directed to a method for assigning and reassigning signalling data channels to remote terminals. The claim recites a first step which results in “each of said remote terminals being initially assigned to a pair of predetermined signalling data channels” (emphasis added). The specification provides that, for example, the central controller may assign a remote terminal to a group of other remote terminals, and thus to the same “specific forward and reverse signalling data channels” as other remote terminals in the group. *See* Ex. 1, col. 3:47-50.

The defendants appear to agree with C-Cation Tech that the claimed “pair of . . . signalling data channels” would be understood as requiring “a forward signalling data channel and a reverse signalling data channel.” The defendants’ construction, however, additionally requires that these forward and reverse signalling data channels be “uniquely coupled.” In addition, the parties disagree upon the construction of the word “predetermined.”

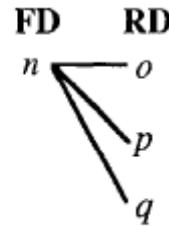
Defendants’ attempt to add the limitation that the forward and reverse channels must be “uniquely coupled”—a phrase that does not appear anywhere in the ’883 patent—should not be adopted. As an initial matter, this limitation does not appear in and is not suggested by the claim

language, and is therefore improper. *See, e.g., Phillips*, 415 F.3d at 1312 (“It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled to the right to exclude.”); *id.* at 1314 (“Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claim terms.”). Defendants’ construction appears to rely on certain disclosures relating to one of many embodiments described in the specification. *See Joint Claim Construction Chart for Disputed Claim Terms*, D.I. 186-1 at 26-30. However, limitations relating to specific embodiments of an invention are not to be added into claims that do not recite them. *See Thorner*, 669 F.3d at 1365-66; *Arlington Indus.*, 632 F.3d at 1254; *i4i Ltd. P’ship*, 598 F.3d at 843; *Kara Tech.*, 582 F.3d at 1348; *Acumed*, 483 F.3d at 807-09. Despite this fundamental precept, defendants attempt to do just that.

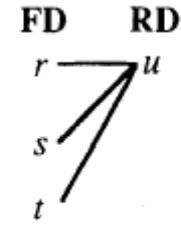
Further, adding in the limitation of “uniquely coupled” would exclude embodiments disclosed in the specification. For example, Figure 3(b) shows that, for example, multiple reverse signalling data channels can be associated with a single forward signalling data channel, and Figure 3(c) shows the opposite scenario:



**Figure 3a**



**Figure 3b**



**Figure 3c**

Ex. 1, Fig. 3. The description of Figure 3 makes clear that the channels need not be uniquely coupled. *See Ex. 1, col. 7:6-31*. Thus, defendants’ attempt to import the “uniquely coupled” limitation into the claims is improper. *See, e.g., In re Katz*, 639 F.3d at 1324 (“there is a strong presumption against a claim construction that excludes a disclosed embodiment”).

The parties' second point of disagreement centers on the word "predetermined," a commonly known word that is readily understood based on the context provided by claim 1:

- (a) establishing communications between said central controller and said plurality of remote terminals via a plurality of signalling data channels, each of said remote terminals being initially assigned to a pair of predetermined signalling data channels;

Plaintiff proposes to construe the word "predetermined" as "determined prior to assignment." This construction provides a temporal frame of reference firmly rooted in the unambiguous claim language itself, which provides that the channels initially assigned to a remote terminal are "predetermined," i.e., "determined prior to assignment."

In contrast, defendants' proposed construction impermissibly seeks to insert two additional limitations into the claim by proposing to construe the word "predetermined" to mean "specified in the remote terminal and central controller before any attempted communication between the two." This construction seeks to import both a structural limitation into the claimed method, requiring that certain channels be "specified in" the central controller and remote terminals, and a temporal limitation, requiring that such specification occur "before any attempted communication between the two." However, these two additional limitations are neither suggested nor required by the claim language. Indeed, claim 1 does not suggest or require that initial channel assignments be "specified in" or stored in the central controller or the remote terminals, let alone both. Nor does claim 1 suggest or require that such specifications occur "before any attempted communication between the two." In addition, the specification does not include any disavowal of claim scope such that defendants' limitations would be proper. Thus, the limitations defendant attempts to add by construing "predetermined" should not be permitted. *See, e.g., Thorner*, 669 F.3d at 1365 (citing *Vitronics*, 90 F.3d at 1580 (Fed. Cir. 1996)).

**2. “predetermined signalling data channels of a plurality of signalling data channels” / “each of said plurality of remote terminals can be assigned to any pair of said plurality of signalling data channels” (claim 6)**

Term	C-Cation Tech's Construction	Defendants' Construction
predetermined signalling data channels of a plurality of signalling data channels	a forward signalling data channel and a reverse signalling data channel determined prior to assignment	one forward and one reverse signalling data channel that are specified in each remote terminal and the central controller before any attempted communication between the two
each of said plurality of remote terminals can be assigned to any pair of said plurality of signalling data channels	each remote terminal may be assigned to any forward signalling data channel and reverse signalling data channel	each remote terminal may be assigned to any uniquely coupled forward and reverse signalling data channels

Similar to claim 1, which recites “establishing communications” by the “remote terminals being initially assigned to a pair of predetermined signalling channels,” step (a) of the method recited in claim 6 also includes an “establishing communications” step. Defendants seek to impose the same limitations on this step in claim 6 as in claim 1—that “predetermined” means “specified in each remote terminal and the central controller before any attempted communication between the two” and that a “pair” of channels must be “uniquely coupled.” But the language of claim 6 provides no more support for adding these limitations than does claim 1. For the same reasons as above (*see supra*, Section IV.D.1), defendants’ attempt to add limitations that are not present in the claim language and that contradict the specification should be rejected.

## E. Monitoring and Reassignment of Channels Steps

1. “monitoring the status of a plurality of the signalling data channels in use . . . for the usability of said signalling data channels” (claim 1(b))

C-Cation Tech’s Construction	Defendants’ Construction
monitoring at least two of the signalling data channels in use for one or more determining factors of availability	monitoring at least two of the signalling data channels being used for conditions that preclude those channels from communicating the signalling data

The dispute concerning the “monitoring” step of claim 1 centers around whether monitoring for the “usability” of signalling data channels includes monitoring for one or more factors of availability, as C-Cation Tech proposes, or whether it is limited to determining conditions that would “preclude those channels from communicating the signalling data.” C-Cation Tech’s proposed construction is supported by the claim language and the specification. *See, e.g.*, Ex. 1, col. 8:35-41 (listing the determining factors of channel availability).

By contrast, defendants seek to improperly read limitations into the claim. Defendants propose that monitoring for “usability” must be binary—whether the channel is usable or not. But neither the specification nor the claim language supports such a limited construction. The described preferred embodiment in the ’883 patent includes the central controller monitoring signalling data channels for a number of factors, and then determining, based on those factors whether reassignment is desirable. For example, the specification states that “channel arrangement can be adjusted according to traffic pattern mix and/or more intelligent management scheme can be implemented with various priority lists.” Ex. 1, col. 6:54-57. The specification further provides several reasons that the central controller may determine that a remote terminal should be reassigned to a different terminal. For example, the specification states that “[a]t any time, the central controller can initiate the terminal re-assignment process if deemed appropriate

for the varying traffic demand or other system dynamics.” *Id.* at col. 8:32-34. The specification continues that “[t]he determining factors of signalling data channels availability include the number of remote terminals using the signalling data channel, the traffic requirements, past collision count, channel error status, and bandwidth of the signalling data channel.” *Id.* at col. 8:35-39. Thus, one of ordinary skill in the art would have understood that in the preferred embodiment, signalling data channels are monitored for a number of factors, which are used by the central controller to determine whether channel reassignment is desirable.

Because defendants’ proposed construction would limit the claimed “monitoring” step beyond the claim language to exclude the preferred embodiment of monitoring for several factors of availability, it should be rejected. “A claim construction that excludes a preferred embodiment . . . ‘is rarely, if ever, correct.’” *Sandisk Corp. v. Memorex Prods, Inc.*, 415 F.3d 1278, 1285 (Fed. Cir. 2005) (quoting *Vitronics*, 90 F.3d at 1583).

**2. “determining whether one of said plurality of remote terminals needs to be reassigned” (claim 1(c))**

C-Cation Tech’s Construction	Defendants’ Construction
Phrase should be given its ordinary meaning and does not require additional construction other than the phrase “remote terminals” as set forth above.	deciding whether a specific remote terminal can no longer communicate signalling data with the central controller over the pair of predetermined signalling data channels

Similar to the “monitoring” step of claim 1, defendants seek to impose a binary limitation on the “determining” step (c)—namely that the central controller must determine whether the remote terminal can communicate on a channel or not. The term “determining whether one of said plurality of remote terminals needs to be reassigned” is clear on its face and can be applied by the jury without construction, and thus requires no construction other than for the term

“remote terminals” as set forth above. *See, e.g., Thorner*, 669 F.3d at 1368; *Finjan*, 626 F.3d at 1207; *U.S. Surgical*, 103 F.3d at 1568.

By contrast, defendants’ proposed construction seeks to impermissibly add a limitation to the claim that is not found in the claim language or the specification. *See Thorner*, 669 F.3d at 1365-66; *Arlington Indus.*, 632 F.3d at 1254; *i4i Ltd. P’ship*, 598 F.3d at 843; *Kara Tech.*, 582 F.3d at 1348; *Acumed*, 483 F.3d at 807-09. The preferred embodiment includes determining whether reassignment is desirable based on many factors, including “the number of remote terminals using the signalling data channel, the traffic requirements, past collision count, channel error status, and bandwidth of the signalling data channel.” *Id.* at col. 8:35-39. Defendants’ proposed binary determination would exclude several of the enumerated factors, and therefore must be rejected. *See Comark Commc’ns, Inc., v. Harris Corp.*, 156 F.3d, 1182, 1187 (Fed. Cir. 1998).

In addition, the sections of the prosecution history cited by the defendants simply do not support either the need to construe this term or the defendants’ proposed construction thereof. Defendants appear to assert that, during prosecution, the inventor distinguished a prior art reference by noting that the prior art did not teach selecting an individual remote terminal for reassignment, but instead only taught adjusting the group codes of control channels for load spreading. *See* Joint Claim Construction Chart for Disputed Claim Terms, D.I. 186-1 at 37. But the prosecution history does not limit reassignment of a remote terminal to circumstances where that terminal “can no longer communicate signalling data with the central controller,” let alone make a clear disavowal of the preferred embodiment. *See Digital-Vending Servs. Int’l v. Univ. of Phoenix, Inc.*, 672 F.3d 1270, 1276 (Fed. Cir. 2012) (“it is particularly important not to limit claim scope based on statements made during prosecution ‘absent a clear disavowal or

contrary definition.””). For this additional reason, defendants’ proposed construction for this term must be rejected.

### **3. “is available” (claims 1 and 5)**

C-Cation Tech’s Construction	Defendants’ Construction
Phrase should be given its ordinary meaning and does not require additional construction.	having spare capacity and acceptable reliability

The term “is available” is also clear on its face and can be applied by the jury without construction. *See Thorner*, 669 F.3d at 1365-66; *Finjan*, 626 F.3d at 1207; *U.S. Surgical Corp.*, 103 F.3d at 1568. Once again, defendants’ proposed construction seeks to improperly import limitations not present in the claim language into the language of the claims. Here, defendants’ construction seeks to limit the availability of a different signalling data channel to the situation where a channel has both spare capacity and acceptable reliability, which is not recited in the claims or supported by the specification. As discussed above, this litigation tactic has been roundly and repeatedly condemned by the Federal Circuit. *See Thorner*, 669 F.3d at 1365-66; *Arlington Indus.*, 632 F.3d at 1254; *i4i Ltd. P’ship*, 598 F.3d at 843; *Kara Tech.*, 582 F.3d at 1348; *Acumed*, 483 F.3d at 807-09.

### **4. “said predetermined signalling data channel” (claims 1 and 4) / “said predetermined channel” (claims 1 and 5)**

Term	C-Cation Tech’s Construction	Defendants’ Construction
said predetermined signalling channel	one of the signalling data channels in use	Indefinite under 35 U.S.C. 112 ¶ 2 due to lack of any express or implied antecedent basis.
said predetermined channel	one of the signalling data channels in use	Indefinite under 35 U.S.C. 112 ¶ 2 due to lack of any express or implied antecedent basis.

Defendants assert that the terms “said predetermined signalling data channel” and “said

“predetermined channel” are indefinite under 35 U.S.C. 112 ¶ 2 for lack of antecedent basis, and are incapable of construction.

A lack of antecedent basis does not render a claim invalid if it can be construed based on an understanding of a person of ordinary skill in the art. “When the meaning of the claim would reasonably be understood by persons of ordinary skill when read in light of the specification, the claim is not subject to invalidity upon departure from the protocol of ‘antecedent basis.’”

*Energizer Holdings, Inc. v. Int'l Trade Com'n*, 435 F.3d 1366, 1370-1 (Fed. Cir. 2006); *In re Skvorecz*, 580 F.3d 1262, 1268-69 (Fed. Cir. 2009). Even where an explicit antecedent basis is absent, “an antecedent basis can be present by implication.” *Energizer*, 435 F.3d at 1371 (citing *Slimfold Manuf. Co. v. Kinkead Indus., Inc.*, 810 F.2d 1113, 1116 (Fed. Cir. 1987)); *see also Paradox Sec. Sys. Ltd. v. ADT Sec. Servs., Inc.*, 710 F. Supp. 2d 590, 611-12 (E.D. Tex. 2008).

In claim 1, it is clear that reference to “other than said predetermined signalling data channel” in step 1(c) and “other than said predetermined channel” in step 1(d) both refer to each of the channels that comprise the recited “a pair of predetermined signalling data channels” in step 1(a). Indeed, the parties do not dispute that “a pair of predetermined signalling data channels” includes one forward and one reverse signalling data channel. Thus, it would be “reasonably ascertainable by those skilled in the art” that the terms “said predetermined signalling data channel” and “said predetermined channel” refer to one of the previously recited “pair of predetermined signalling data channels,” namely, either the forward or reverse signalling data channel to which the remote terminal is assigned by the central controller in step (a) of claim 1.

The specific context in which “said predetermined signalling data channel” and “said predetermined channel” appear in the claims and the specification of the ’883 patent make

abundantly clear that a person of ordinary skill in the art would understand the terms. Step (a) of claim 1 requires establishing communications between a central controller and a plurality of remote terminals, “each of said remote terminals being initially assigned to a pair of predetermined signalling data channels.” Step (c) then requires determining whether a remote terminal should “be reassigned to a different signalling data channel other than said predetermined signalling data channel,” and step (d) recites determining whether a signalling data channel is available “other than said predetermined channel.” One of ordinary skill in the art would have understood that the channels referred to in steps (c) and (d) are either the forward signalling data channel or reverse signalling data channel to which the remote terminal was initially assigned in step (a).

The specification of the ’883 patent further supports this understanding as it indicates that the pair of signalling data channels to which a remote terminal is initially assigned comprise a forward and reverse signalling data channel:

“[i]f there is no available signalling data channel already in use, the central controller will check for available channel from the pool of transmitters and/or the poll of receivers, and proceeds with allocation if there is available channel from the pool (or a pair in case that neither the forward nor the reverse signalling data channels are available).”

Ex. 1, col. 8:44-50 (emphasis added).

Therefore, the terms “said predetermined signalling data channel” and “said predetermined channel” are clearly not “insolubly ambiguous,” and cannot be deemed indefinite. *See Cies Bisker, LLC v. 3M Co.*, No. 2:08-CV-115 (DF), 2009 U.S. Dist. LEXIS 10055, at \*35 (E.D. Tex. Nov. 25, 2009) (citing *Young v. Lumenis, Inc.*, 492 F.3d 1336 (Fed. Cir. 2007)); *see also Energizer*, 435 F.3d at 1371 (“A claim that is amenable to construction is not invalid on the ground of indefiniteness.”).

**5. “reassigning by said central controller said remote terminal to a different and suitable signalling data channel” (claim 1)**

C-Cation Tech’s Construction	Defendants’ Construction
Phrase should be given its ordinary meaning and does not require additional construction other than the phrases “remote terminal” and “signalling data channel” as set forth above.	commanding the remote terminal, by the central controller and based upon the determinations of need and availability, to change to a different and suitable signalling data channel

The term “reassigning by said central controller said remote terminal to a different and suitable signalling data channel” is easily understood by one of ordinary skill in the art, and does not require construction other than for the terms “remote terminal” and “signalling data channel” as set forth above in Sections IV.C. and IV.B.1, respectively. *See Thorner*, 669 F.3d at 1365-66; *Finjan*, 626 F.3d at 1207; *U.S. Surgical Corp.*, 103 F.3d at 1568.

Once again, defendants’ proposed construction seeks to improperly import limitations into the claims. Here, for example, defendants seek to improperly add the limitations “commanding the remote terminal . . . to change” and “based upon the determinations of need and availability” despite any basis in the claim language for doing so. *See, e.g., Thorner*, 669 F.3d at 1365-66. Indeed, defendants’ identification of nearly an entire step of a method claim as requiring construction as opposed to particular terms, is evidence of defendants’ intent to simply add limitations to the otherwise clear bounds of the claim language. *See Grantley Patent Holdings, Ltd. v. Clear Channel Commc’ns., Inc.*, No. 9:06-cv-259-RC, 2008 U.S. Dist. LEXIS 1588, at \*12-13 (E.D. Tex. Jan. 8, 2008) (“A troubling aspect of this case is the submission by [Defendant] of entire paragraphs of certain claims for construction when there was really no dispute over the meaning of any particular word or term.”)

#### **6. “new signalling data channel” (claim 5)**

C-Cation Tech’s Construction	Defendants’ Construction
Phrase should be given its ordinary meaning and does not require additional construction other than the phrase “signalling data channel” as set forth above.	unused signalling data channel

The term “new signalling data channel” is yet another term that is clear on its face and can be applied by the jury without construction. *See Thorner*, 669 F.3d at 1365-66; *Finjan*, 626 F.3d at 1207; *U.S. Surgical Corp.*, 103 F.3d at 1568.

While defendants appear to assert that the ’883 patent prosecution history supports their proposed construction of “new signalling data channel,” the passages cited point to nothing more than the inventor’s recitation of step (b) of claim 5 of “allocating a new signalling data channel if no signalling data channel has spare capacity and a new signalling data channel is available,” to distinguish a prior art reference. *See* Joint Claim Construction Chart for Disputed Claim Terms, D.I. 186-1 at 47-48. Defendants’ attempt to limit the term “new signalling data channel” to an “unused” signalling data channel is therefore unsupported by the portion of prosecution history they cite, which in any event falls well short of demonstrating a clear disavowal of claim scope. *See Digital-Vending Servs.*, 672 F.3d at 1276. Thus, defendants’ proposed construction for this term should be rejected.

#### **F. Polling and Resolving Contention (claims 6 and 7)**

##### **1. “polling a plurality of said plurality of remote terminals simultaneously” (claim 6)**

C-Cation Tech’s Construction	Defendants’ Construction
soliciting two or more of the plurality of remote terminals simultaneously	soliciting at the same time all terminals assigned to a given forward signalling data channel

The proposed constructions of “polling” and “remote terminals” were discussed above in Sections IV and IV.C, respectively. With respect to the term “plurality,” C-Cation Tech submits that this term should be construed to mean “two or more” in order to ease the jury’s understanding of a term of art commonly employed by patent attorneys in drafting patent claims. The remaining term “simultaneously” is easily understood and requires no construction.

By contrast, defendants once again seek to improperly import limitations into the claim that are not present in the claim language and that are contradicted by the specification. Here defendants seek to construe “polling a plurality of said plurality of remote terminals” as requiring polling “all terminals assigned to a given forward signalling data channel” (emphasis added). Defendants’ proposed construction is particularly improper as the inventor chose to use a well understood claim term, *i.e.*, a plurality, that explicitly allows for polling less than “all terminals” assigned to a particular forward signalling data channel. *See Dayco Prods. v. Total Containment Inc.*, 258 F.3d 1317, 1327-28 (Fed. Cir. 2001) (“In accordance with standard dictionary definitions, we have held that “plurality,” when used in a claim, refers to two or more items, absent some indication to the contrary.” (citing *York Prods., Inc. v. Cent. Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1575 (Fed. Cir. 1996)); *see also ResQNet.Com, Inc. v. Lansa, Inc.*, 346 F.3d 1374, 1382 (Fed. Cir. 2003) (““plurality does not mean ‘all’” where there were no “expressions of manifest exclusion of restriction, representing a clear disavowal of claim scope.”).

In support of their proposed construction, defendants appear to assert that during prosecution, the inventor distinguished a prior art reference by noting that claim 6 requires that “the central controller polls [a] group of remote terminals instead of individual terminal for pending request.” Joint Claim Construction Chart for Disputed Claim Terms, D.I. 186-1 at 50.

However, the inventor noted that the central controller polls a “group” of remote terminals, not “all terminals” assigned to a given channel. Thus, defendants’ attempt to limit this claim to soliciting “all terminals assigned to a given forward signalling data channel” is not supported by the passages of the prosecution history they cite.<sup>6</sup>

**2. “resolving contention . . . by said central controller if there is a pending request from more than one remote terminal on the same signalling data channel” (claim 6)**

C-Cation Tech’s Construction	Defendants’ Construction
“Contention” should be construed as “a condition when two or more remote terminals try to transmit data at the same time,” and, otherwise, the phrase should be given its ordinary meaning and does not require additional construction other than the phrases “remote terminal,” and “signalling data channel” as set forth above.	using selective polling by the central controller to allow transmission by only a single remote terminal after detecting collision of two or more terminals’ requests on a signalling data channel

The phrase “resolving contention . . . by said central controller if there is a pending request from more than one remote terminal on the same signalling data channel” is readily understood by one of ordinary skill in the art, and does not require additional construction beyond the term “contention,” and the terms “remote terminal” and “signalling data channel” as set forth above in Sections IV.C and IV.B.1, respectively. As to the term “contention,” the specification of the ’883 patent makes clear that a contention occurs when two or more remote terminals attempt to transmit data at the same time. For example, the specification describes that when multiple remote terminals are assigned to the same channel in the reverse direction, as demonstrated in Figure 3(c), collisions may result. *See Ex. 1, col. 7:19-26.* On the other hand the specification states that “[t]here is no contention in the forward direction, i.e., the traffic on

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<sup>6</sup> Defendants also cite to extrinsic evidence for their improper construction. *See Joint Claim Construction Chart for Disputed Claim Terms, D.I. 186-1 at 51-52.* However, the alleged extrinsic evidence does not validate adding a limitation to a claim term that is clearly not found within the intrinsic evidence. *See Phillips, 415 F.3d at 1318.*

each FD-x channel is scheduled independently.” *Id.* at col. 6:37-39. C-Cation Tech’s proposed construction of “contention” also comports with the definition for that term provided by *The IEEE Standard Dictionary of Electrical and Electronics Terms* (6th ed. 1996), which defines a “contention” as “[a] condition on a multipoint communication channel when two or more locations try to transmit at the same time.” *Id.* at 209.

The remaining terms in the phrase do not require construction. As set forth above, it is unnecessary to provide a construction for a claim term unless there is some uncertainty as to its meaning or scope. The meaning of the phrase “resolving contention . . . by said central controller if there is a pending request from more than one remote terminal on the same signalling data channel” would be understood by one of skill in the art utilizing the constructions for terms “contention,” “remote terminal,” and “signalling data channel” discussed above.

Moreover, defendants’ submission of an entire step of a method claim as a “term” for construction, rather than identifying particular words or isolated terms as requiring construction, is evidence of defendants’ intent to simply add limitations to the otherwise clear bounds of the claim language. *See Grantley Patent Holdings, Ltd.*, 2008 U.S. Dist. LEXIS 1588, at \*12-13 (“A troubling aspect of this case is the submission by [Defendant] of entire paragraphs of certain claims for construction when there was really no dispute over the meaning of any particular word or term.”). Accordingly, defendants’ proposed construction for this term should be rejected.

## V. CONCLUSION

For the foregoing reasons, C-Cation Tech respectfully requests that the Court adopt its constructions where provided, and decline to construe the terms that C-Cation Tech has indicated do not require construction.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I certify that on March 22, 2013 all counsel of record were served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3).

By: /s/ Sam Baxter